

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

## Application Review

**Issue Date: DRAFT**

**Region:** Mooresville Regional Office  
**County:** Cleveland  
**NC Facility ID:** 2300115  
**Inspector's Name:** Karyn Kurek  
**Date of Last Inspection:** 10/02/2019  
**Compliance Code:** 3 / Compliance - inspection

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| <p style="text-align: center;"><b>Facility Data</b></p> <p><b>Applicant (Facility's Name):</b> General Shale Brick, Inc. - Kings Mountain Facility</p> <p><b>Facility Address:</b><br/>         General Shale Brick, Inc. - Kings Mountain Facility<br/>         1622 Longbranch Road<br/>         Grover, NC 28073</p> <p><b>SIC:</b> 3251 / Brick And Structural Clay Tile<br/> <b>NAICS:</b> 327121 / Brick and Structural Clay Tile Manufacturing</p> <p><b>Facility Classification: Before:</b> Title V <b>After:</b> Title V<br/> <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V</p> | <p style="text-align: center;"><b>Permit Applicability (this application only)</b></p> <p><b>SIP:</b> 15A NCAC 02D .0515, .0516, .0521, .0524, .1109, .1111, and .1806<br/> <b>NSPS:</b> 40 CFR 60, Subpart OOO<br/> <b>NESHAP:</b> 40 CFR 63, Subpart CCCCCC<br/> <b>PSD:</b><br/> <b>PSD Avoidance:</b><br/> <b>NC Toxics:</b><br/> <b>112(r):</b><br/> <b>Other:</b> Case-by-Case Brick MACT</p> |
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| Contact Data  |  |  | Application Data   |
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| <p style="text-align: center;"><b>Facility Contact</b></p> <p>Chris Tipton<br/>         Plant Manager<br/>         (704) 937-7431<br/>         1622 Longbranch Road<br/>         Grover, NC 28073</p> | <p style="text-align: center;"><b>Authorized Contact</b></p> <p>Kevin Ham<br/>         VP Engineering &amp; Research<br/>         (423) 282-4661<br/>         3015 Bristol Highway<br/>         Johnson City, TN 37601</p> | <p style="text-align: center;"><b>Technical Contact</b></p> <p>J. Warren Paschal<br/>         Manager of Environmental Compliance<br/>         (919) 774-6533<br/>         300 Brick Plant Road<br/>         Moncure, NC 27559</p> | <p><b>Application Number:</b> 2300115.17A<br/> <b>Date Received:</b> 12/08/2017<br/> <b>Application Type:</b> Renewal<br/> <b>Application Schedule:</b> TV-Renewal</p> <p style="text-align: center;"><b>Existing Permit Data</b></p> <p><b>Existing Permit Number:</b> 06156/T12<br/> <b>Existing Permit Issue Date:</b> 12/18/2014<br/> <b>Existing Permit Expiration Date:</b> 09/30/2018</p> |

| Total Actual emissions in TONS/YEAR: |       |      |        |       |       |           |  |
|--------------------------------------|-------|------|--------|-------|-------|-----------|--|
| CY                                   | SO2   | NOX  | VOC    | CO    | PM10  | Total HAP | Largest HAP                                |
| 2018                                 | 9.60  | 5.02 | 0.7700 | 17.19 | 16.57 | 14.72     | 12.18<br>[Hydrogen fluoride (hydrofluori)] |
| 2017                                 | 10.27 | 5.36 | 0.8300 | 18.39 | 17.51 | 15.74     | 13.02<br>[Hydrogen fluoride (hydrofluori)] |
| 2016                                 | 10.22 | 5.34 | 0.8300 | 18.31 | 17.52 | 15.68     | 12.97<br>[Hydrogen fluoride (hydrofluori)] |
| 2015                                 | 11.38 | 5.95 | 0.9200 | 20.39 | 16.28 | 17.50     | 14.44<br>[Hydrogen fluoride (hydrofluori)] |
| 2014                                 | 8.57  | 4.48 | 0.6900 | 15.36 | 12.02 | 13.18     | 10.88<br>[Hydrogen fluoride (hydrofluori)] |

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| <p><b>Review Engineer:</b> Jenny Sheppard</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date: DRAFT</b></p> | <p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue</b> 06156/T13<br/> <b>Permit Issue Date:</b><br/> <b>Permit Expiration Date:</b></p> |
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**1. Purpose of Application:**

This permitting action is a renewal of an existing Title V permit pursuant to 15A NCAC 02Q .0513. The existing Title V permit (06156T12) was issued on December 18, 2014. The renewal application was received on December 8, 2017 and deemed complete. Since the renewal application was received at least nine months prior to the expiration date, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

**2. Facility Description**

General Shale Brick, Inc. owns and operates a brick manufacturing facility in Grover, NC. The facility is operating under the existing air permit 06156T12 issued on December 18, 2017.

**3. History/Background/Application Chronology**

**October 17, 2013** – Renewal and Significant Modification (add 112(j)), permit number 06156T10 issued by Jenny Sheppard.

**February 3, 2014** – Ownership/Name Change, permit 06156T11 issued by Connie Horne.

**December 18, 2014** – Significant modification Part I to add thin brick kiln ES-4, permit 06156T12 issued by Jenny Sheppard.

**December 8, 2017** - Application 2300115.17A received as TV renewal application. Changes to renewal permit noted by regional inspector received via email February 20, 2018 again on September 24, 2019.

**4. Permit Modifications/Changes and ESM Discussion**

Table of changes to permit 06156T12

| Page(s)    | Section                  | Description of Change(s)   |
|------------|--------------------------|--|
| Throughout |                          | Update permit revision number and issue date, revise insignificant activity list and TVEE                                    |
|            | Insignificant Activities | Add MACT 6C reference to I-Tank4   |
| 3          | Section 1, Table         | Added note for ES-4 concerning 02Q .0501(b)(2) second step   |
| 4-11       | Section 2.1              | Starting in Section 2.1 A through 2.2 A updating all conditions to current language and other permit language as it applies. |
| 12         | Section 3                | General Conditions updated to current language   |

**5. Regulatory Review**

The facility is subject to the following regulations:

15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes  
15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources  
15A NCAC 2D .0521, Control of Visible Emissions  
15A NCAC 2D .0524, NSPS 40 CFR Part 60 Subpart OOO  
15A NCAC 2D .1806, Control of Odorous Emissions (*State-Enforceable Only*)  
15A NCAC 2D .1109, CAA § 112(j); Case-by-Case MACT for Brick Manufacturers

A regulatory review for these current permit conditions will not be included in this document as the applicability to these has not changed from when it was originally established. Where applicable, the permit conditions have been modified to reflect current working shell conditions.

## 6. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

### NSPS

The facility (emission sources, ES-F2, ES-F4, and ES-F3) is currently subject to New Source Performance Standard (NSPS) OOO. Two conveyors and one primary crusher (ES-F2, ES-F4, and ES-F3) are affected sources under 40 CFR 60 Subpart OOO. For the conveyors (ID Nos. ES-F2 and ES-F4), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) particulate matter emissions limit of ten (10) percent opacity from each individual affected facility. For the primary crusher (ID No. ES-F3), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) particulate matter emissions limit of fifteen (15) percent opacity. The permit includes the appropriate Subpart language and continued compliance is expected.

### NESHAP/MACT

**15A NCAC 02D .1109 – CAA Section 112(j); Case-by-Case MACT for Brick Manufacturers** – On March 13, 2007, the D.C. Circuit Court vacated the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Brick & Structural Clay Products Manufacturing, which had been promulgated under 40 CFR 63, Subpart JJJJ. The North Carolina Attorney General's office has determined that the NESHAP vacatur equates to the failure of the U.S. EPA to promulgate a standard as required under Section 112(d) of the Clean Air Act (CAA). As a result, the site-specific Maximum Achievable Control Technology (MACT) standards required under CAA Section 112(j), commonly referred to as the MACT "hammer" provisions, have been triggered. North Carolina regulations implementing the MACT hammer are found at 15A NCAC 02D .1109.

#### **Re: Kilns with a Capacity < 10 tph (Natural gas/propane as fuel)**

On November 3, 2009, the NC DAQ received a Part 2 MACT "Hammer" application from this facility for the natural gas/propane-fired tunnel kiln. The kiln (ID No. ES-1) has a design capacity of 10 tons per hour. The facility has requested a limitation of less than 10 tons/hour of fired product total on a 12-month rolling average basis. The NC DAQ has determined that MACT is the use of best work practice standards for the tunnel kiln rated at less than 10 tons per hour.

NESHAP for Brick and Structural Clay Products final rule was effective on December 28, 2015. Currently the facility has 112(j) Case By Case MACT requirements that will sunset December 27, 2023. The application states the facility will continue to comply with Section 112(j) requirements and have deferred their decision to comply with the requirements of Section 112(d) or become HAP minor at a later date.

#### **15A NCAC 02D .1111 – 40 CFR 63 Subpart CCCCCC – NESHAP for Gasoline Dispensing Facilities**

The facility has a 1000 gallon gasoline storage tank (ID No. I-Tank4) and is subject to MACT CCCCCC. The tank is currently on the Insignificant Activities list and the rule reference has been add. Compliance is expected.

### PSD

This facility is currently minor for PSD purposes. This permit renewal does not affect this status.

### Attainment Status

This facility is located in Cleveland County, which is currently in attainment. Cleveland County has triggered increment tracking under PSD for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub>. However, this permit renewal does not consume or expand increments for any pollutants.

### 112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect this status.

## **CAM**

40 CFR 64 requires that a continuous assurance monitoring plan be developed for all equipment located at a major facility that have pre-controlled emissions above the major source threshold and use a control device to meet an applicable standard. The facility has evaluated each source for CAM applicability and has determined that the sources either do not have a control device to meet compliance with an emission limit or a standard for a federally regulated pollutant or the sources have uncontrolled potential emission of less than 100 tons. Therefore, CAM does not apply to this facility at this time. No new control devices have been added since the last renewal.

### **7. Facility Wide Air Toxics**

There is no change required for this renewal.

### **8. Facility Compliance Status/Compliance History:**

The last compliance inspection was performed on October 2, 2019 by Karyn Kurek and the facility was found likely to be in compliance. Since the last renewal, the facility has been issued two Notices of Violation for Monitoring and Record Keeping violations for ES-2, the four rock facing operations (dated February 15 and October 8 of 2018). The permit requires weekly VE requirements (placed in the permit at the last renewal). The facility was performing monthly observation as is required by all other emission sources in the permit. As a result, the facility and the region requested the weekly observation be changed to monthly. This change has been made as part of this latest renewal.

### **9. Public Notice/EPA and Affected State(s) Review**

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. The State of Virginia and the Forsyth County Local Program are affected state/local program within 50 miles of the facility.

**The following comments were received: *Complete after comment period.***

### **10. Conclusions, Comments, and Recommendations**

A professional engineer's seal was not required for the renewal application.

A consistency determination was not required for the renewal application.

MRO recommends issuance of the permit and was sent a DRAFT permit prior to issuance. RCO concurs with MRO's recommendation to issue the renewed air permit.